

201
8.1 HW

p 510 - 511 3-5, 7-9 12-13 19-21 26

3. $(9-2)180 = 1260^\circ$

4. $(14-2)180 = 2160^\circ$

5. $(16-2)180 = 2520^\circ$

Sum Int

7. 360° quadrilateral

8. 720° hexagon

9. 1980° $1980 = (n-2)180$

$$11 = n - 2$$

$$\boxed{13 = n}$$

12. $x + 90 + 162 + 101 + 96 + 121 = 720$

$$\boxed{x = 150}$$

$$(6-2)180$$

13. $x + 143 + 2x + 152 + 116 + 125 + 140 + 139 = 1080$

$$3x + 815 = 1080$$

$$3x = 265$$

$$\boxed{x = 88\frac{1}{3}}$$

$$(7-2)180$$

14. $x + 65 + 106 + 78 = 360$

$$\boxed{x = 111^\circ}$$

15. $2x + 77 + x + 40 + 49 = 360$

$$3x + 162 = 360$$

$$3x = 198$$

$$\boxed{x = 66}$$

18-2

19. $540 \div 5 = 108^\circ$ int
 $360 \div 5 = 72^\circ$ ext

20

160° int
 $360 \div 18 = 20^\circ$ ext

21. 176° int
 $360 \div 90 = 4^\circ$ ext

26. (a) $180 - 165 = 15^\circ \rightarrow$ each ext

$360 \div 15 = 24$ sides ✓ yes

(b) $180 - 171 = 9$

$360 \div 9 = 40$ yes ✓

(c) $180 - 75 = 105$

$360 \div 105 = 3.428$ No

(d) $180 - 40 = 140$

$360 \div 140 = 2.57$

No